



MICHIGAN CHAPTER

October 24, 2011

To: Senator Nofs and members of the
Senate Energy and Technology Committee

RE: Review of Public Act 295 of 2008

Opening Comment

The Michigan Sierra Club Supports PA 295 of 2008 and calls for a stronger RPS and EO standard to further continue the success of Renewable Energy and Energy Efficiency in Michigan.

Arguments in support of PA 295 - RPS

RPS is creating Jobs in Michigan

The Renewable Portfolio Standard has assured investors and developers that Michigan is planning to utilize renewable energy, which has created many jobs in Michigan. For example, Northern Power Systems is set to employ over 137 people at a factory that produces wind turbines in Saginaw, United Solar employs 242 people in Aubrun Hills, and the Gratiot County wind project has already created countless jobs. There are many examples of the jobs created by PA 295.

http://www.ourmidland.com/news/article_cf1af9c4-f336-11e0-a9c7-001cc4c002e0.html

<http://www.brighterenergy.org/20476/news/wind/michigan-celebrates-first-large-scale-wind-turbine-manufacturing/>

<http://www.nrdc.org/energy/renewables/michigan.asp>

Renewables and Energy Efficiency are cheaper than Coal and Nuclear Energy

An MPSC report that came out in February compares the relative prices of various sources of energy. It shows that renewable energy and energy efficiency are both cheaper than new coal or nuclear energy. It is believed that renewable energy prices have continued to decrease since the time of this report, as well.

http://www.michigan.gov/documents/mpsc/Report_on_Implementation_of_PA_295_RE_Standards_and_Cost_Effectiveness_of_Standards_345871_7.pdf

RPS hasn't had a significant impact on customers' bills

A recent article in *Midwest Energy News (MWEN)* took a look at the experiences of Midwest utilities to date and concluded that the most comprehensive studies to date and the experience of utilities so far suggest that, by and large, renewable portfolio standards haven't had a significant impact on customers' bills.

<http://www.midwestenergynews.com/2011/05/17/are-renewable-standards-driving-up-utility-rates/>

<http://www.grist.org/energy-policy/2011-06-30-renewable-portfolio-standards-worth-it>



Arguments for a more expansive RPS in Michigan

Manufactures need a strong, long term RPS to invest in Michigan

Michigan's RPS is relatively weak and of short duration compared to other Midwest states. (Examples: IL 25%/2025, MN 27%/2025, OH 12.5%/2025). This is a source of uncertainty for potential Michigan wind industry manufacturers and puts Michigan at a regional disadvantage.

Michigan is squandering its' wind and manufacturing potential

Michigan has the best wind energy potential in the Midwest, but through the first four months of 2011, wind accounted for 20% of Iowa's net electric generation, 13% in Minnesota, 4% in Indiana, 4% in Illinois, 2% in Wisconsin and only **.4% in Michigan**. An increased RPS would make us more competitive with other state in the Midwest. See table 1.17.B and 1.6.B in http://www.eia.gov/cneaf/electricity/epm/epm_sum.html

Michigan residents strongly favor renewable energy

An overwhelming 95% of survey respondents believe that the development of renewable energy is either somewhat important or very important for Michigan's economic recovery.
http://www.landpolicy.msu.edu/modules.php?name=Documents&op=viewlive&sp_id=1449

Approximately two-thirds of US consumers would like their electric companies to invest in wind and solar, and are willing to pay a surcharge for these options.
<http://www.deloitte.com/us/resourcesstudy2011>

Michigan utilities, businesses and others have endorsed a strong RPS

The Michigan Climate Action Council (MCAC) unanimously endorsed a 25%/2025 RPS. MCAC was comprised of 35 members representing academia, a broad base of industry, utilities (including Consumers Energy and DTE), state and local government and others. This RPS is also consistent with the Midwestern Governors Association (MGA) platform.
<http://www.miclimatchange.us/ewebeditpro/items/O46F21226.pdf>

Iowa Case Study - wind energy helps keep electric rates low and creates jobs

From 2006 to 2011 May, Iowa's overall electric rate rose just 4% while it rose 28% in Michigan and 9% in the total US. Since 2006, wind's share of Iowa electric generation increased from 5% to 21% (YTD). Wind accounted for 25% of Iowa's net electric generation in May alone. (Wind's share in Michigan remained very low at 0.002% in 2006 and 0.04% in 2011.) Iowa has strong RPS, 25% by 2025. According to a recent poll by pollster Neil Newhouse, 81% percent of Iowa voters believe that the growth of the wind industry has been good for the state's economy. Furthermore, Iowa voters chose wind, by a 3-to-1 margin, as their preferred energy source to power their state. Over 200 wind-related businesses now operate in 56 Iowa counties, adding over \$5 billion to the Iowa economy. In 2010 alone, wind farm owners paid \$16.5 million in property taxes. The wind industry alone supports 2,667 manufacturing and operation/maintenance jobs. This could easily be the case in Michigan if we enacted a stronger Renewable Portfolio Standard.

http://www.nawindpower.com/naw/e107_plugins/content/content.php?content.8385



Coal Related Comments

Michigan has to diversify our electric generation portfolio

Michigan's economy may be at risk because of our over-reliance on coal to generate electricity. We have too many eggs in one basket. The price of coal delivered to Michigan utilities has soared. Consequently, we pay a higher price for delivered coal and for electricity than in most states.

There are many health and economic issues with coal

The total cost of coal generation must include the damage caused by coal mining, burning and ash. These externalities include damaged health, premature death, lost productivity and damage to our environment. A Harvard study estimated these costs are an additional 17.84¢/kWh. This provides more reason to expand our commitment to clean, renewable energy sources.

<http://onlinelibrary.wiley.com/doi/10.1111/j.1749-6632.2010.05890.x/full>

The price of coal delivered to Michigan utilities is increasing quickly

A common measure of the price of coal delivered to US utilities in dollars per million Btu (MMBtu) to account for the different coal Btu values. According to the Energy Information Administration (EIA), in the past 5+ years, the delivered price of coal to Michigan utilities increased 82%. It increased from \$1.58 per MMBtu in 2005 to \$2.87 in May 2011.

Of concern is the rapid price increase in the past year. Comparing May 2011 to May 2010, the price of delivered coal to Michigan utilities increased 43% (from \$2.01 to \$2.87)

Other Midwestern states had much smaller increases IN. +16%, IL + 7%, OH +8%. Table 4.10.B. http://www.eia.gov/electricity/monthly/current_year/august2011.pdf

The price of delivered coal to Michigan will continue to increase

DTE reports a significant increase in forecast coal expense in 2011 is due to the replacement of a long rail transportation agreement. They state coal expenses will also increase 18% in 2012 and 10% in 2013." P 43/200 <http://efile.mpsc.state.mi.us/efile/docs/16434/0001.pdf>

Large cost increases should also continue because of increasing diesel fuel surcharges. The cost of delivered coal now depends much more on the price of oil (diesel and lubricants) than the cost of coal mining.

Michigan has the highest electric rates in the Midwest, by far

Michigan has the highest average retail price of electricity in the Midwest at 10.45¢ per kilowatthour. This is far higher than in Ohio 8.79¢, Indiana 8.05¢, or Illinois 8.94¢. Table 5.6.A. May 2011 http://www.eia.gov/cneaf/electricity/epm/epm_sum.html

States Dependent on Coal Had the Highest Electricity Price Increases in Past 5 Years

The retail price of electricity in the US increased 22% over the past five years (from 8.1¢ in 2005 to 9.9¢ in 2010). However, two regions very dependent on coal saw their electric bills increase the most since 2005. East South Central (TN KY MS AL) saw their rates increase 34% (from 6.14¢ to 8.21¢) and East North Central (Michigan OH IN IL WI) had a 32% increase



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(from 6.87¢ to 9.09¢). Regions less dependent on coal experienced smaller than average electric price increases. For example, Pacific coast +17% and West South Central (TX AR LA OK) +3%. http://www.eia.gov/emeu/steo/pub/cf_query/index.cfm
http://www.eei.org/ourissues/ElectricityGeneration/FuelDiversity/Documents/diversity_map.pdf



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Arguments in Support of PA 295 - Energy Efficiency

The Program has Worked - Cost

Energy Efficiency provided the cheapest source of baseload power. The energy optimization cost of conserved energy weighted average was determined to be \$13.25/MWh versus \$133/MWh as the levelized cost of a new conventional coal fired power facility.

The Program has Worked – Energy and Greenhouse Gas Savings

In 2009 alone, Michigan reduced our energy need by 375,652 MWh. That resulted in a reduction of approximately 571,069,927 pounds of Carbon Dioxide emissions. That is approximately equivalent to the amount produced from 50,791 cars in a year.

<http://aceee.org/research-report/u112>

The Program has Worked – Michigan is Improving

A recent report published by the American Council for an Energy Efficient Economy shows that Michigan is one of the top 6 most improved states in the country, in regard to Energy Efficiency savings. The report points out that this vast improvement is due to the implementation PA 295.

<http://aceee.org/research-report/e115>

The Program has Worked – Utilities are Making a Profit Too

Consumers got a \$5 million bonus for exceeding the EO standard in 2009 and DTE got a \$8.5 million bonus in 2011. Consumers Energy saved its customers \$38 million through energy efficiency last year, and stands to earn a \$8.5 million reward.

http://www.mlive.com/business/jackson-lansing/index.ssf/2011/05/consumers_energy_customers_sav.html



Arguments for a more Expansive EO Standard

Increase or Remove the EO Spending Cap

There are spending limits on how much each utilities can collect and spend on Energy Efficiency. In 2011, the cap is set at 1.5% of a utilities total retail sales revenue and in 2012 and thereafter, the cap will become 2%. Both Consumers and DTE have met their goals and spending cap early. This means they can't invest in more EE, even though it's the cheapest form of new energy. We support increasing the spending cap on energy efficiency, or removing it completely.

Michigan's Energy Efficiency Resource Standard (EERS) is the Weakest in the Midwest

The purpose of an EERS is to help ratepayers become more electric and natural gas efficient. An ACEEE analysis indicates Michigan's EERS is the weakest in the Midwest and will result in less energy savings. From the ACEEE Report:

	<u>Cumulative Electricity</u>	<u>Annual Resource Standard</u>	
	<u>Savings/2020</u>	<u>Electricity</u>	<u>Memo: Natural Gas</u>
Illinois	18.0%	2.0% in 2015	1.5% 2019
Minnesota	16.5%	1.5% in 2010	1.5% 2013
Iowa	16.1%	1.5% in 2013	1.2% 2013
Indiana	13.8%	2.0% in 2019	
Wisconsin	13.5%	1.5% in 2014	1.0% 2013
Ohio	12.1%	2.0% in 2019	
Michigan	10.6%	1.0% in 2012	.75% 2012

See pages 15, 50/66

in: <http://www.aceee.org/sites/default/files/publications/researchreports/u112.pdf>

It Matters by about \$100 million a Year in Savings

Per the EIA, Michigan spends about \$10 billion a year on electricity.

Table 5.5.B <http://www.eia.gov/ftproot/electricity/epm/02261103.pdf>

Moving from the current 1% to a 2% annual electric resource standard could save Michigan ratepayers \$100 million a year. This is about \$40 million annually for residential and about \$60 million for commercial/industrial. For every \$1 spent on energy efficiency programs, customers will save \$3 in avoided energy costs.

<http://www.michigan.gov/mpsc/0,1607,7-159-52495---,00.html>



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Concluding Comment

The Michigan Sierra Club Supports PA 295 of 2008 and Calls for a stronger RPS and EO standard to further continue the success of Renewable Energy and Energy Efficiency in Michigan. This will help us move toward clean, affordable, homegrown renewable energy, energy efficiency, and move away from imported dirty coal.

Sincerely,

Anne Woiwode
State Director
Sierra Club Michigan Chapter